Government Actuary's Department

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12 May 2026

Dear Marcus,

Subject: Public Service Pensions (Valuations and Employer Cost Cap) (Amendment) Directions 2026

1. Thank you for your letter of 11 May 2026 requesting my professional opinion on the draft Public Service Pensions (Valuations and Employer Cost Cap) (Amendment) Directions 2026 (the "Amending Directions"), which amend the Public Service Pensions (Valuations and Employer Cost Cap) Directions 2023 (the "2023 Directions"). This request has been made in accordance with section 11(4) of the Public Service Pensions Act 2013 (the "2013 Act"), which requires the Treasury to consult the Government Actuary before issuing or revising valuation directions under section 11(2).

2. You have asked me to assess how far the Amending Directions deliver your five stated aims and align with the ten government objectives you have set out, and to comment on their technical completeness and internal consistency. You have also asked for my views on how any divergence between actual GDP experience and the SCAPE discount rate might be monitored.

3. The report attached to this letter contains detailed responses to these questions and wider considerations affecting the public service pension scheme valuations.

Executive summary

4. In my opinion the 2023 Directions as amended by the draft Amending Directions achieve the five aims set out in paragraph 6 of your letter.

5. In my opinion, as a whole, the 2023 Directions as amended by the draft Amending Directions will deliver results for the 2024 valuations that largely meet the stated objectives (listed in paragraph 7 of your letter), with some better met than others. Further detail is set out in the letter from the previous Government Actuary to HMT for the 2020 valuations,

dated 29 August 2023. In my opinion, the 2023 Directions as amended by the draft Amending Directions are technically complete and coherent when taken as a whole.

6. I note that there would be more than one way to reasonably meet the objectives and that another set of Directions and assumptions may do so as sufficiently.

7. There are areas of conflict between some of the government's stated objectives (in particular between no bias and consistency) which mean not all can be met in full and there are some trade-offs between them. This was also the case for the 2023 Directions.

Actual GDP experience

8. To support the monitoring of the divergence between actual GDP experience and the SCAPE discount rate, I recommend that, following the completion of the 2024 valuations, additional work should be commissioned to show what the impact of actual GDP experience would have been, if it had been allowed for in the 2024 valuations.

SCAPE discount rate methodology

9. My report only reviews the level of the SCAPE discount rate, based on the existing methodology, and does not review the methodology. Government intends to continue to review the methodology used to set the SCAPE discount rate at appropriate intervals[1]. HM Treasury has decided not to review the methodology at this valuation. I agree this is reasonable, given that the previous review concluded less than 4 years ago. I recommend that HM Treasury considers when it would be appropriate to review the methodology.

Valuation data

10. The valuation reports provide a wealth of important data regarding the public service pension schemes. The valuation reports, supporting advice and data summaries will all be publicly available on gov.uk. My department will be happy to work with HM Treasury to consider how to collate this information to allow simple comparisons to be made across Government and between schemes, for example in relation to issues such as the gender pension gap.

Yours sincerely

Fiona Dunsire
Government Actuary

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1 https://assets.publishing.service.gov.uk/media/60d3381f8fa8f57ce3773db4/SCAPE_Discount_Rate_methodologyFD.pdf

Government Actuary's Department

Public Service Pensions (Valuations and Employer Cost Cap) (Amendment) Directions 2026

12 May 2026
Fiona Dunsire FIA C.Act
Government Actuary

Navigating risk | Cutting through complexity

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Contents

1. Introduction

1.1 Section 11(4) of the Public Service Pensions Act 2013 (the "2013 Act") requires the Treasury to consult the Government Actuary before making or amending valuation directions made under section 11(2). This report is in response to HM Treasury's letter of 11 May 2026 (the "HMT letter") requesting my professional opinion as Government Actuary on the draft Public Service Pensions (Valuations and Employer Cost Cap) (Amendment) Directions 2026 (the "Amending Directions").

1.2 The HMT letter requests my views on the following points:

a. The extent to which the Amending Directions achieve the five aims and meet the ten government objectives set out in the HMT letter;

b. The extent to which they are technically complete and coherent; and

c. How to monitor any divergence between actual GDP experience and the SCAPE discount rate.

1.3 This report sets out my responses to these questions.

a. In section 2, I comment on how the draft Amending Directions interact with the objectives and meet the aims set out in the HMT letter.

b. In section 3, I comment on how the draft Amending Directions affect the provisional results of the valuations of the public service pension schemes as at 31 March 2024 ("the 2024 valuations"), compared to the equivalent results of the 31 March 2020 valuations ("the 2020 valuations").

c. In section 4, I comment on considerations around monitoring actual GDP experience.

1.4 My key conclusions and recommendations are set out in the covering letter attached to this report.

Background to the 2024 valuations

1.5 The 2024 valuations are currently underway. If the draft amendments are made, the 2023 Directions (as amended by the draft Amending Directions attached to the HMT letter) will set the framework for these valuations.

1.6 The previous valuations had an effective date of 31 March 2020. The results of these 2024 valuations will inform the Employer Contribution Rate (the "ECR") payable from 1 April 2027 for each of the unfunded schemes.

1.7 As part of the 2024 valuations process, scheme costs as measured by the Cost Control Mechanism (the "CCM") will be compared to the employer cost caps for the public service schemes, including LGPS, in the same way as for the 2020 valuations.

1.8 Alongside the valuation, responsible authorities for the schemes will also test whether member contributions are expected to achieve the target yield over the implementation period from 1 April 2027 to 31 March 2031. Where the expected yield is above or below the target, there may be changes made to the member contributions.

Direction changes

1.9 The 2023 Directions followed major changes to public service pension schemes resulting from the reforms to the CCM and implementation of the McCloud and Sargeant remedy[1]. The 2023 Directions therefore substantively revised the prior directions. By contrast, the draft Amending Directions make only a small number of changes to the 2023 Directions.

1.10 As well as updating the directed financial and demographic assumptions, these amendments are intended to improve the efficiency of the valuations by streamlining processes which are not expected to lead to a material impact on the valuation results, and removing any aspects of the 2023 Directions that are no longer required.

[1] Public service pension schemes consultation: changes to the transitional arrangements to the 2015 schemes - GOV.UK

2. Commentary on draft Directions

2.1 I comment below on each of the five aims of the Amending Directions, as set out in paragraph 5 of the HMT letter, and the extent to which these meet the Government's objectives, where relevant:

a. Update the **SCAPE discount rate** from CPI + 1.7% per year to CPI + 2.0% per year

b. Update **directed assumptions** for schemes to use in completing their valuations to current best estimates (i.e. without any adjustment for prudence or optimism)

c. Improve consistency between schemes by directing the **payroll growth** assumption

d. Improve efficiency by allowing scheme actuary judgement in what **experience analysis** to carry out

e. Make **technical changes** to ensure the valuations operate as intended and removing any aspects that are no longer required

Update to SCAPE discount rate

2.2 The SCAPE discount rate of CPI + 2% per year is based on the assumed GDP growth rate information available alongside the OBR's July 2025 Fiscal Risks and Sustainability ("FRS") report, the latest available at the current date. This compares to CPI + 1.7% per year for the 2020 valuations. The SCAPE discount rate has been derived in a way consistent with the defined methodology for reviewing the level of the SCAPE discount rate at each valuation cycle[2]. Updating this assumption supports the no bias objective, i.e. that assumptions should be current best estimates.

Update to Directed assumptions

2.3 The draft Amending Directions specify a number of assumptions that must be used by all schemes in their valuations. These include:

a. Economic and financial assumptions. These are based on economic forecasts produced by the OBR, available alongside the Economic and Fiscal Outlook ("EFO") published in November 2025 (for short-term assumptions) and the July 2025 FRS report (for long-term assumptions). These are intended to be best estimates without any margin for prudence or optimism.

b. Assumptions for future changes in life expectancy. These are based on the 2022 principal population projection[3] (the Migration Category Variant) for the UK produced by the ONS These are also intended to be best estimates.

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[2] Public service pensions: Consultation on the discount rate methodology - GOV.UK
[3] https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/

2.4 OBR published a further EFO in March 2026 and the ONS published its 2024-based population projections on 28 April 2026[4]. As set out in Appendix C, our current understanding is that the impact on life expectancies between the 2022- and 2024-based population projections is small.

2.5 HM Treasury has decided not to use these most recent updates in the draft Amending Directions. This is because there are practical requirements that the assumptions are fixed at a point in time, to allow the calculations across all of the unfunded public service schemes to be efficiently carried out and allow sufficient lead-in time for contribution rates to be implemented within required timescales.

2.6 The CCM is based only on long-term assumptions, so is not affected by the EFO. In addition the use of ONS 2022 rather than ONS 2024-based population projections is not expected to change CCM outcomes. Therefore, the objectives relating to the CCM continue to be met even though the most recent EFO and ONS population projections are not used.

2.7 To the extent that actual experience varies compared to these assumptions, this will work its way through the valuations in the usual way and will be recognised at the following valuation as at 2028.

2.8 While use of the latest EFO forecasts and ONS population projections would meet the “no bias” objective better, the practical and efficiency arguments that assumptions must be fixed at some point to allow calculations to proceed are stronger. In my opinion, this is a reasonable approach. In addition, the 2022-based population projections are used to derive both the mortality improvement assumption and the GDP growth rate underlying the SCAPE discount rate. Thus using a different set of mortality improvements within the calculations would reduce the internal consistency of the assumptions, impacting their coherence.

2.9 The global economy has experienced a period of significant volatility and uncertainty since the March 2026 EFO and July 2025 FRS OBR forecasts were made as a result of the current conflict in Iran and the Middle East. It may be that a forecast made now would be materially different. In particular, the current geopolitical situation may result in an increase in short term inflation and a reduction in expected GDP growth (and potentially have longer term impacts), which would have implications for the ECRs. Given the significant uncertainty, I believe it is reasonable not to make adjustments for this in the assumptions. As outlined above, actual experience will be recognised in the 2028 valuations. The 2024 valuations will also include sensitivity analysis to the key financial assumptions.

2.10 The long-term assumptions for CPI, public sector pay growth and general earnings growth (used by some CARE schemes to revalue their benefits) are unchanged since the 2020 valuations.

[4] National population projections - Office for National Statistics

2.11 Amending Direction 8 specifies that the inflation assumption and earnings revaluation order will be based on pension increase orders only if they are made before 1 April 2026 (and will use assumptions set out in the Directions for later years). I agree that this helps to ensure consistency between schemes even if any were to complete their valuation after the 2027 pension increase order is made. However, the effect of this is to reduce the extent to which the no bias objective is met.

2.12 In broad terms, the impact of the short-term economic and financial assumptions set out in the draft Amending Directions is expected to reduce the average ECR compared to those currently in place. Further details showing the differences between the assumptions as at the 2020 and 2024 valuations are set out in Appendices A and B.

2.13 The effect of using the ONS 2022-based principal population projection mortality improvements compared to the assumption used at the 2020 valuations is relatively small and may be broadly neutral for some schemes, although schemes with a predominantly male membership may see a small reduction in the ECR. The reasons for this are discussed further in Appendix C.

2.14 Updating the directed assumptions broadly supports the no bias objective (albeit with the caveat noted above around the use of the latest EFO forecasts and ONS population projections).

Payroll growth

2.15 Amending direction 13 specifies that the aggregate payroll should be assumed to grow in line with the directed pay increase assumption (i.e., the assumption used to project members’ pay growth, excluding promotional increases) rather than permitting a scheme-specific approach. This calculation is used when spreading a surplus or deficit over a number of future years.

2.16 At the 2020 valuations, some schemes adopted a payroll growth assumption in line with their departmental OBR projections if they diverged sufficiently from the assumed general increase in public service earnings.

2.17 Payroll growth is subjective and challenging to predict with any certainty. For example, planned workforce exercises may change under different governments, or as needs evolve (e.g. during the COVID-19 pandemic).

2.18 This means that it is difficult for departments to obtain a robust, evidence-based view of future payroll growth for individual schemes. A high-level comparison using the limited publicly available information of historic workforce growth does not clearly indicate better alignment with one approach or the other, especially over the longer term.

2.19 Directing the future payroll growth better supports the consistency objective and makes the valuation process more efficient compared to previous valuations. It does, however, potentially reduce the extent to which the no bias objective is met for some schemes.

Analysis of experience

2.20 Amending direction 14 clarifies that the scheme actuary can use their professional judgement to determine which assumptions warrant an analysis of how experience compares to assumptions. It also removes the associated reporting requirement where such analysis is not undertaken.

2.21 This makes it clear that the scheme actuary may decide not to analyse particular elements of the experience where, in their judgement, it is not appropriate or relevant to the valuation.

2.22 This amendment should improve the clarity objective, by improving the clarity of valuation reports since it removes the need to include analysis which is not useful to the reader. While it may lead to some differences in reporting between schemes, these are expected to largely reflect genuine differences in schemes' design and experience.

Technical changes

2.23 Amending directions 4–7, 15 and 17–47 make technical changes to ensure the valuations work as intended, remove any redundant provisions and consolidate LGPS-specific rules. This includes updates on reconstructed first cost cap valuations and the three-year ECR implementation period used at the 2020 valuation instead of the usual four year period. It also updates the past service technical immunity adjustment and cost cap future service cost methodology to be suitable for the 2024 and later valuations and corrects some typographical errors.

2.24 I agree that these proposed amendments ensure that the valuation calculations are in line with the policy intent. The aspects that are no longer required relate to calculations that were done at valuations which have now all been completed.

2.25 These changes support the clarity objective.

3. Impact of draft Directions on provisional results

Provisional valuation outcomes

3.1 In this section I consider the provisional outcomes from the 2024 valuations to provide some context on the fiscal impact of the Amending Directions and considerations for public sector employers.

3.2 The average ECR across the unfunded public service pension schemes is expected to fall significantly as a result of the increase in the SCAPE discount rate.

3.3 As these are unfunded schemes, lower employer contributions would be expected to be offset by higher Exchequer funding to meet benefit outgo, and would therefore score as higher Annually Managed Expenditure (AME). I understand that HMT is considering how to adjust funding settlements to allow for this.

3.4 For employers that participate in public service pension schemes but do not receive government funding (e.g. independent schools participating in the Teachers' Pension Scheme), lower employer contributions would reduce costs with no corresponding change in their income. To the extent that this reduces contribution income to the scheme, it would increase the Exchequer funding required to meet benefit outgo and would therefore increase AME (and in turn increase public sector current expenditure).

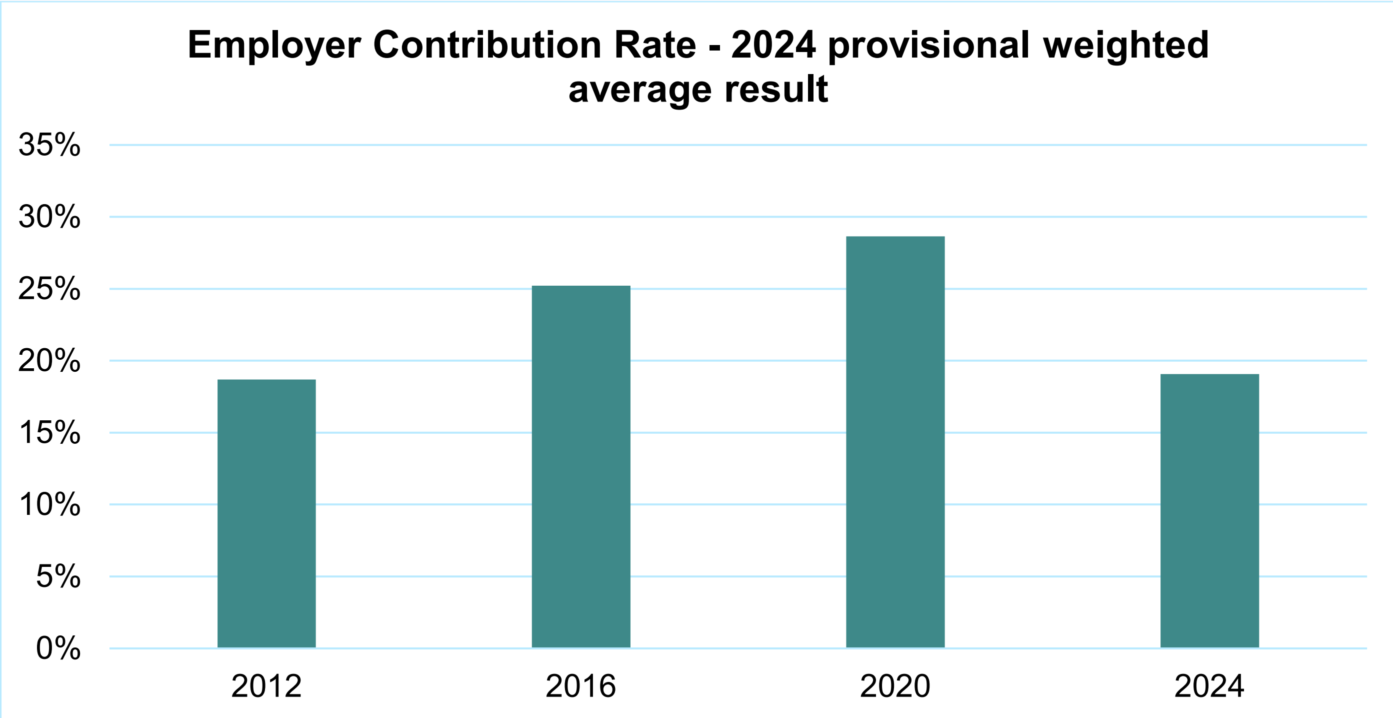
Provisional results for largest schemes

3.5 In this section I consider the provisional results of the 2024 valuations from the four largest schemes, set out below. These provisional results are included to help provide context for the potential impact of the draft Amending Directions on the valuation results.

3.6 These provisional results were provided to HM Treasury by the respective schemes in April 2026 and are quoted in aggregate for this report. I have relied on the accuracy and completeness of these provisional results for the purposes of this report. However, these results are subject to further review and are based on the draft Amending Directions and provisional assumptions, either or both of which may be subject to change.

3.7 Valuation results are critically dependent on the quality and accuracy of the data used. I set out some comments on data quality in Appendix D.

3.8 The increase in the SCAPE discount rate serves to reduce the value placed on future benefit payments, therefore reducing the contributions necessary to cover the cost of these benefits accruing. The chart below shows the average ECRs (weighted by payroll) for the four largest schemes following previous valuations, and the equivalent average provisional ECRs following the 2024 valuations.

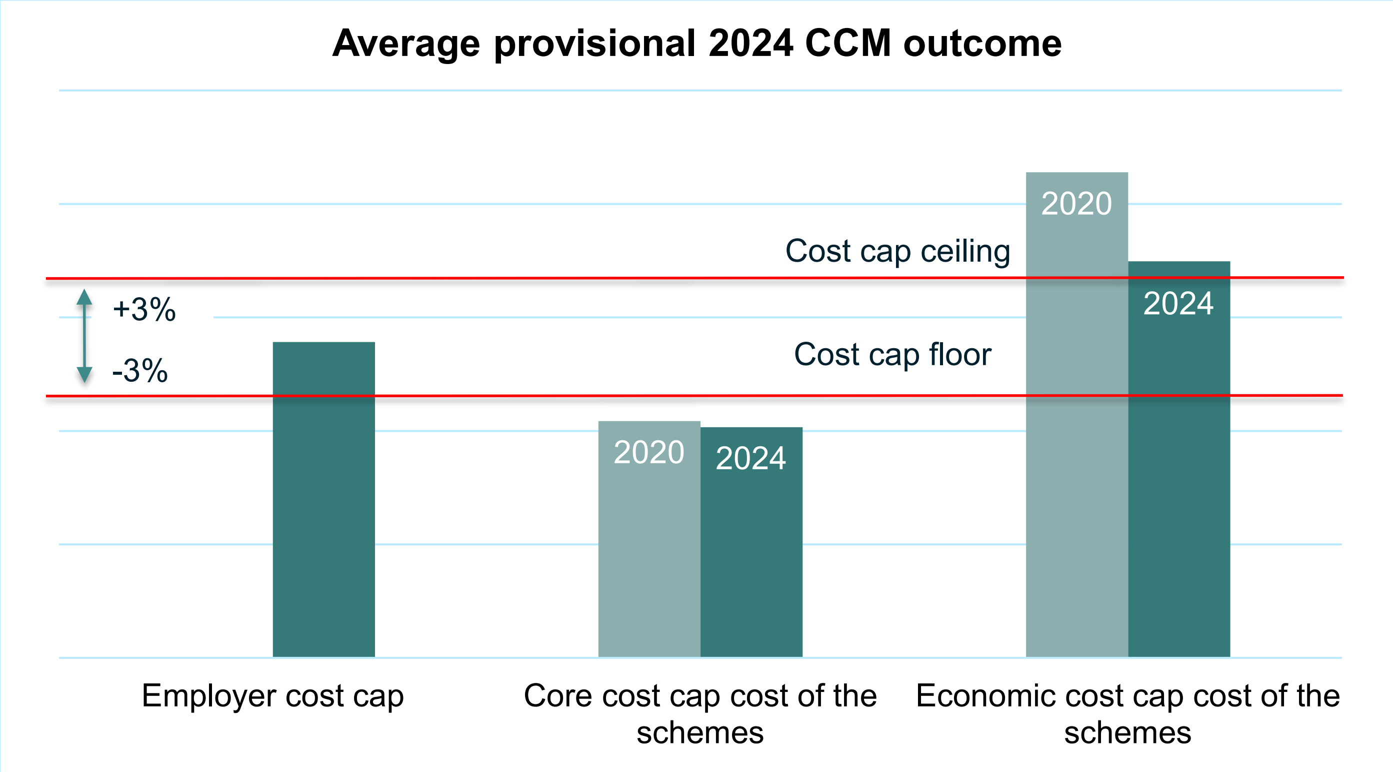


3.9 This chart shows that, based on the provisional results for the four largest schemes, the weighted average ECR for these schemes falls to broadly similar levels as for the 2012 valuations. The decrease in SCAPE discount rate from CPI + 3% per year in 2012 to CPI + 2% per year for the 2024 valuations is largely offset as a result of changes in demographic assumptions and deficit reduction contributions paid over the period.

3.10 Based on these provisional results for the four largest schemes, aggregate employer contributions are expected to be over £12 billion lower in 2027/28 than 2026/27. As results for other schemes become available, aggregate employer contributions are expected to be lower still.

3.11 The core cost cap cost in the CCM is expected to be lower for all schemes compared with the employer cost cap set at the 2012 valuations. This is primarily due to the rate of improvement in life expectancy being lower than that assumed in 2012. This pattern was also seen in the 2020 valuations.

3.12 Many schemes are expected to breach the core cost cap floor i.e. their core cost cap cost will be more than 3% lower than the employer cost cap cost set at the 2012 valuations. However, as shown in the chart below, the weighted average overall outcome of the CCM based on the four largest schemes indicates there will be no breach, since the core cost cap cost and the economic cost cap cost breach in opposite directions (meaning no requirement to make changes to the schemes). This outcome is likely for the other schemes as well, although this cannot be known for certain until all the final results are available.



3.13 The weighted average core cost cap cost and economic cost cap cost have both reduced compared to the 2020 valuations for these four schemes. However, the change in the weighted average core cost cap cost is small (and some individual schemes may experience increases). The weighted average economic cost cap cost has reduced to a much greater extent due to the increase in the SCAPE discount rate between 2020 and 2024.

Potential future impacts

3.14 No CCM breaches are expected at this valuation after applying the economic check. However, the change in the SCAPE discount rate makes a floor breach more likely than at the 2020 valuations. Further increases in the discount rate could also trigger floor breaches at future valuations by reducing the economic cost cap cost and hence leading to potential benefit improvements. While this will be scheme-specific, GAD's initial analysis based on the 2020 valuations suggests that:

a. If the SCAPE discount rate increased to CPI + 2.2% per year or higher, this could cause floor breaches in some schemes. Combined with other reductions in costs, e.g. a further slowdown in the rate of life expectancy improvements, there may be more widespread floor breaches.

b. If the SCAPE discount rate reverted to closer to CPI + 3.0% per year (the rate when the employer cost caps were set at the 2012 valuations) this may lead to widespread floor breaches.

3.15 Conversely, the emergence of significant non-economic increases in costs, such as projected future life expectancy increasing without an associated change in State

Pension age, may lead to benefit reductions. The increase in life expectancy to result in this scenario would most likely need to be in excess of five years (with no offsetting increase to State Pension age) compared to that assumed for the 2020 valuations.

4. Monitoring actual GDP experience

4.1 As part of the calculation of the ECR, a comparison is carried out between the notional assets and past service liabilities for each scheme. Any difference between the assets and liabilities results in an adjustment to the ECR to reflect differences in experience compared to assumptions. This supports the completeness objective.

4.2 Paragraph 9 of the HMT letter notes that in line with past practice, the draft Amending Directions do not require the impact of actual GDP experience to be taken into account within the 2024 valuations, or require it to be reported on as an information item. This means that the notional asset calculation uses the assumed real rate of GDP growth and not actual GDP experience.

4.3 The previous Government Actuary recommended that HM Treasury should consider monitoring how actual GDP compares with the assumed SCAPE discount rate over time. Paragraph 12 of the HMT letter asks for my views on how this could be achieved.

4.4 I recommend that once the 2024 valuations are completed, additional work should be commissioned to show what the impact of actual GDP experience would have been, if it had been allowed for in the 2024 valuations. This analysis would provide information on the impact of excluding GDP experience and could also be used to support a decision around whether to allow for actual GDP experience in future valuations.

5. Compliance and limitations

5.1 This report is addressed to HM Treasury. The purpose of this report is to set out my professional opinion on the draft Amending Directions. I understand that HM Treasury may publish this report. Other than HM Treasury, no person or third party is entitled to place any reliance on the contents of this report. GAD has no liability to any person or third party for any action taken or for any failure to act, either in whole or in part, on the basis of this report.

5.2 This report has been prepared in accordance with the applicable Technical Actuarial Standards: TAS 100 and TAS 300 issued by the Financial Reporting Council (FRC). The FRC sets technical standards for actuarial work in the UK.

5.3 Public service pension schemes also use discount rates for other purposes, including individual and bulk transfers into and out of schemes, calculation of the value of pension benefits in divorce proceedings, and the production of various actuarial factors for member options, such as actuarially reduced early retirement benefits and the setting of commutation factors in a minority of schemes. In some cases, the SCAPE discount rate is used as the discount rate for these purposes. These uses and impacts are not in the scope of this report.

5.4 Work on the 2024 valuations shows that, as for previous valuations, data quality remains an issue in some areas. This could require adjustments to ECRs in future to correct any over- or under-payments from April 2027 resulting from data deficiencies found at future valuations.

Appendix A – SCAPE discount rates (2026 vs 2023 Directions)

A.1. Amending directions 13 and 16 change the SCAPE discount rate from 1.7% a year above CPI to the proposed rate of 2.0% a year above CPI.

A.2. The SCAPE discount rate is based on the OBR's long-term economic determinants dated 22 July 2025 published alongside the FRS[5] and HM Treasury's methodology for setting the discount rate.

A.3. In 2023, following a public consultation[6], the Government decided that:

a. the SCAPE discount rate will continue to be set based on expected long-term GDP growth

b. It would aim to conduct one review of the level of the discount rate per valuation cycle, with the precise timing of the review determined by HM Treasury

A.4. This report reviews the level of the SCAPE discount rate only, based on the expected long-term GDP growth methodology retained in 2023. A review of the SCAPE discount rate methodology (as distinct from the review of the level of the discount rate) is out of the scope of this report.

A.5. The previous methodology review[7] satisfied the commitment that the SCAPE discount rate methodology should be reviewed ten years after it was first set. The government's response to the consultation on the SCAPE methodology review did not state HM Treasury's policy on the frequency of any further methodology reviews.

A.6. The following table sets out the main demographic assumptions underlying the ONS population projections adopted for each OBR forecast used to set the SCAPE discount rate at a valuation and the workforce growth figure derived by OBR from the population projection.

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[5] https://obr.uk/frs/fiscal-risks-and-sustainability-july-2025/
https://obr.uk/download/long-term-economic-determinants-march-2025-economic-and-fiscal-outlook/?tmstv=1774432101

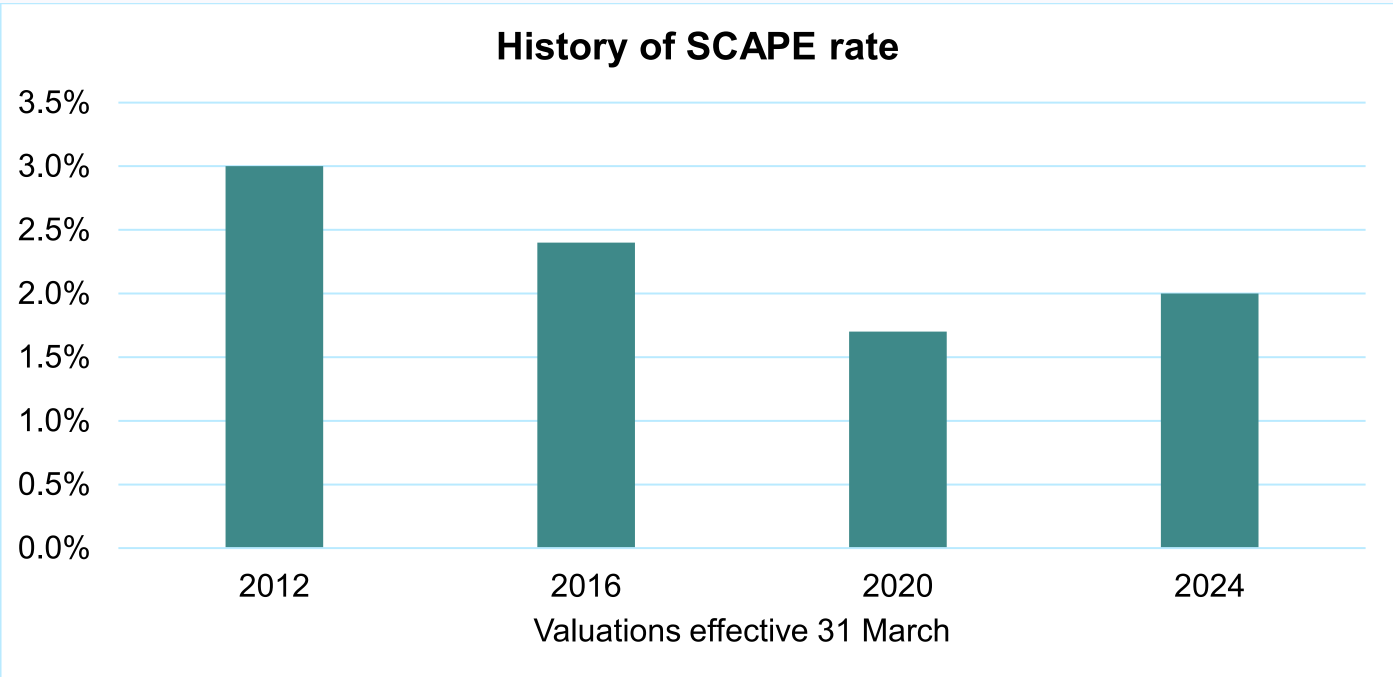
[6] Public service pensions: Consultation on the discount rate methodology - GOV.UK

[7] https://assets.publishing.service.gov.uk/media/60d3381f8fa8f57ce3773db4/SCAPE_Discount_Rate_methodologyFD.pdf

Valuation as at 1 April	OBR forecast	ONS Population projection selected by OBR	Completed family size (births per woman)	Long-term average annual net inward migration (000 pa)	Workforce growth (% pa)
2012	2012 FSR	2008-based low migration variant	1.84	120	0.13
2016	2018 FSR	2016-based principal	1.84	165	0.23
2020	2022 FRS	2020-based OBR low migration baseline variant	1.59	129	-0.1
2024	2025 FRS	2022-based migration category variant	1.45	340	0.2

Derivation of SCAPE discount rate

A.7. The chart below shows how the SCAPE discount rate has changed since the 2012 valuations.



A.8. The table below shows how the components of the SCAPE discount rate have changed compared to previously announced SCAPE discount rates:

Valuation effective date 31 March	2012	2016	2020	2024
Labour Productivity	2.0	2.0	1.5	1.5
Workforce growth	0.1	0.2	-0.1	0.2
GDP deflator-CPI	0.7	0.2	0.3	0.3
Rounding	0.2	0.0	0.0	0.0
SCAPE discount rate	**3.0**	**2.4**	**1.7**	**2.0**

As can be seen from the table, the increase in the SCAPE discount rate for the 2024 valuations compared to the 2020 valuations is due to an increase in the OBR’s expectations for long-term workforce growth.

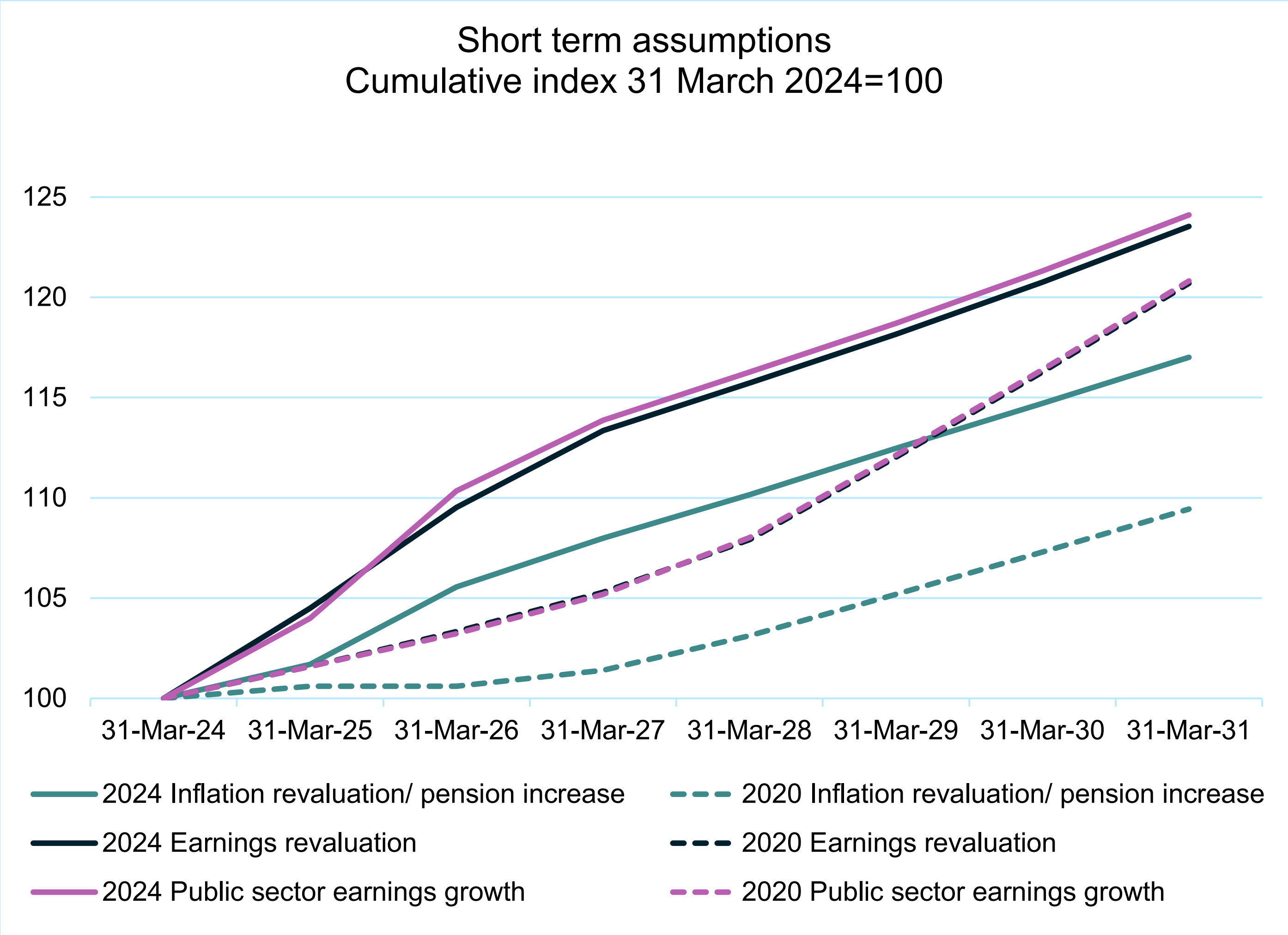
A.9. Changes in workforce growth can come from migration, and also from changes in the profile of a population. For example, for the 2024 population projections published on 28 April 2026, the ONS has reduced its net international migration assumption compared to that used for the 2022 projections. Depending on the population projection used by the OBR, this may decrease forecast GDP growth.

A.10. The OBR’s 2025 FRS suggested two sensitivity scenarios for productivity growth. The low productivity scenario was 0.5% a year, around the average experienced by the UK in the decade following the financial crisis. The high scenario was 2.5% a year, around the average during the 1990’s. These scenarios would lead to SCAPE discount rates of 1.0% and 3.0% a year, respectively. A SCAPE discount rate of 3.0% would lead to significantly lower employer contribution rates and widespread cost control floor breaches. A SCAPE discount rate of 1.0% would lead to significantly higher employer contribution rates.

A.11. The OBR notes in its 2025 FRS report that damage from climate change is likely to have a material impact on UK productivity and GDP growth. GAD would be happy to carry out further sensitivity analysis on this.

Appendix B – Directed financial assumptions (2026 vs 2023 Directions)

B.1. The graph below shows the short-term economic assumptions proposed for the 2024 valuations. They also show the comparative assumptions adopted for the 2020 valuations. Note that the 2020 earnings revaluation and public sector earnings growth lines effectively coincide.



B.2. The OBR's assumed rate of public sector earnings growth may not always align fully with the pay awards granted in any particular year, even where that information is already available. Differences can arise from timing, coverage and the fact that the OBR assumption is an aggregate forecasting input rather than a direct measure of pay-settlement outturns. These differences are expected to be small in the context of the valuation and do not, of themselves, justify amending the OBR figures or adopting a different approach. There is no alternative data source that is more appropriate for this purpose and consistently available on a comparable basis. The methodology is the same as adopted for the 2020 valuations, although the assumptions have been updated.

B.3. Cumulative inflation, earnings revaluation and public sector earnings growth in the period 2024-31 are all expected to be higher under the 2024 valuation assumptions than the 2020 assumptions. However, the gap between the cumulative earnings growth and inflation under the 2024 assumption is less than it was under the 2020 assumptions with cumulative real earnings growth over the seven year short-term period of around 6% under the proposed assumptions compared to 10% under the 2020 assumptions. In aggregate, the current set of short-term of public sector earnings growth assumptions (net of CPI) are thus lower than those at the 2020 valuations. In isolation, this will lead to a decrease in ECRs. Given the passage of time, changes in economic conditions and the nature of forecasting such assumptions, it is not surprising that the short-term assumptions differ from those at the previous valuation.

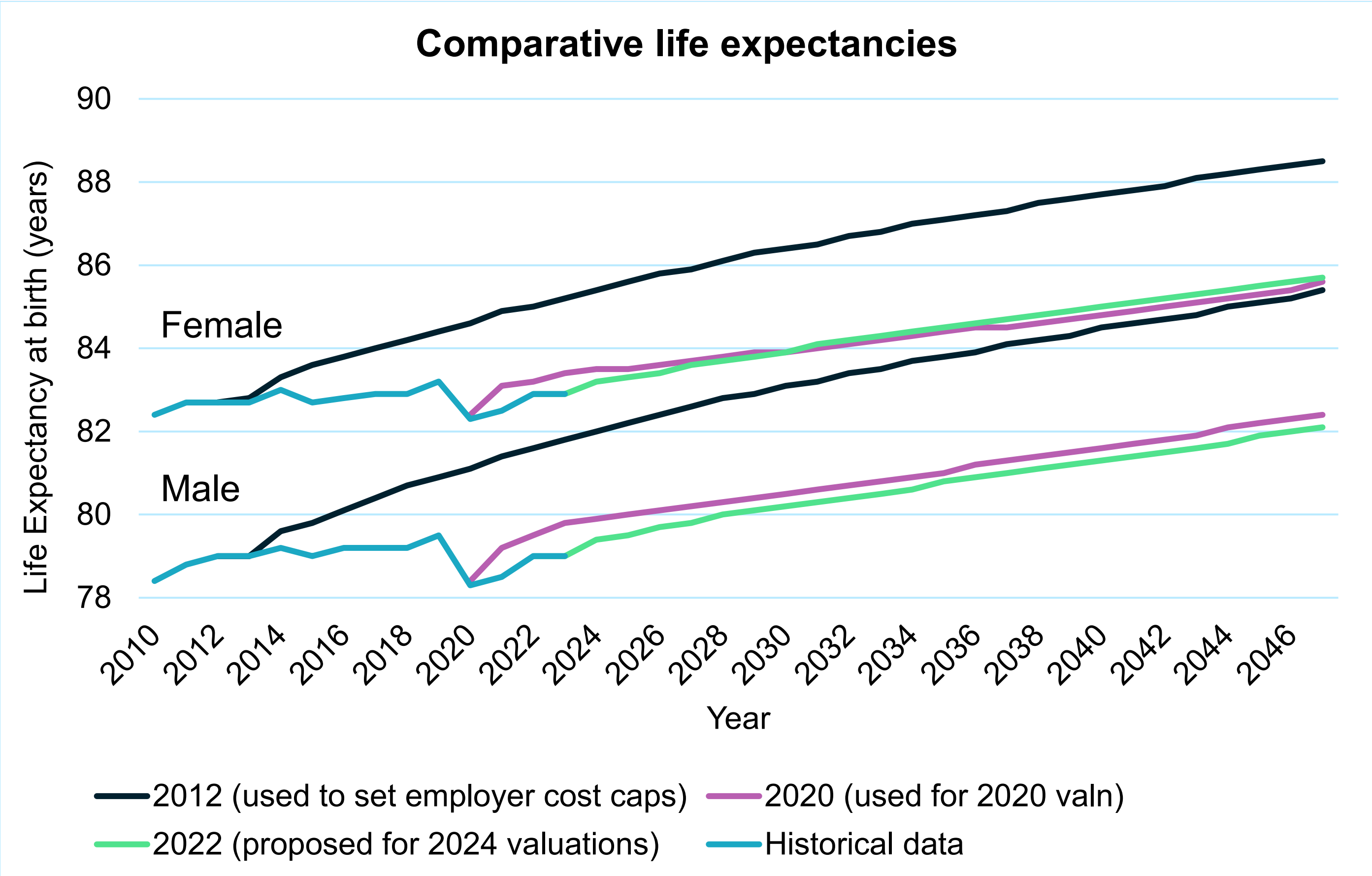
Appendix C – Mortality improvements

Mortality improvements

Background to mortality projections

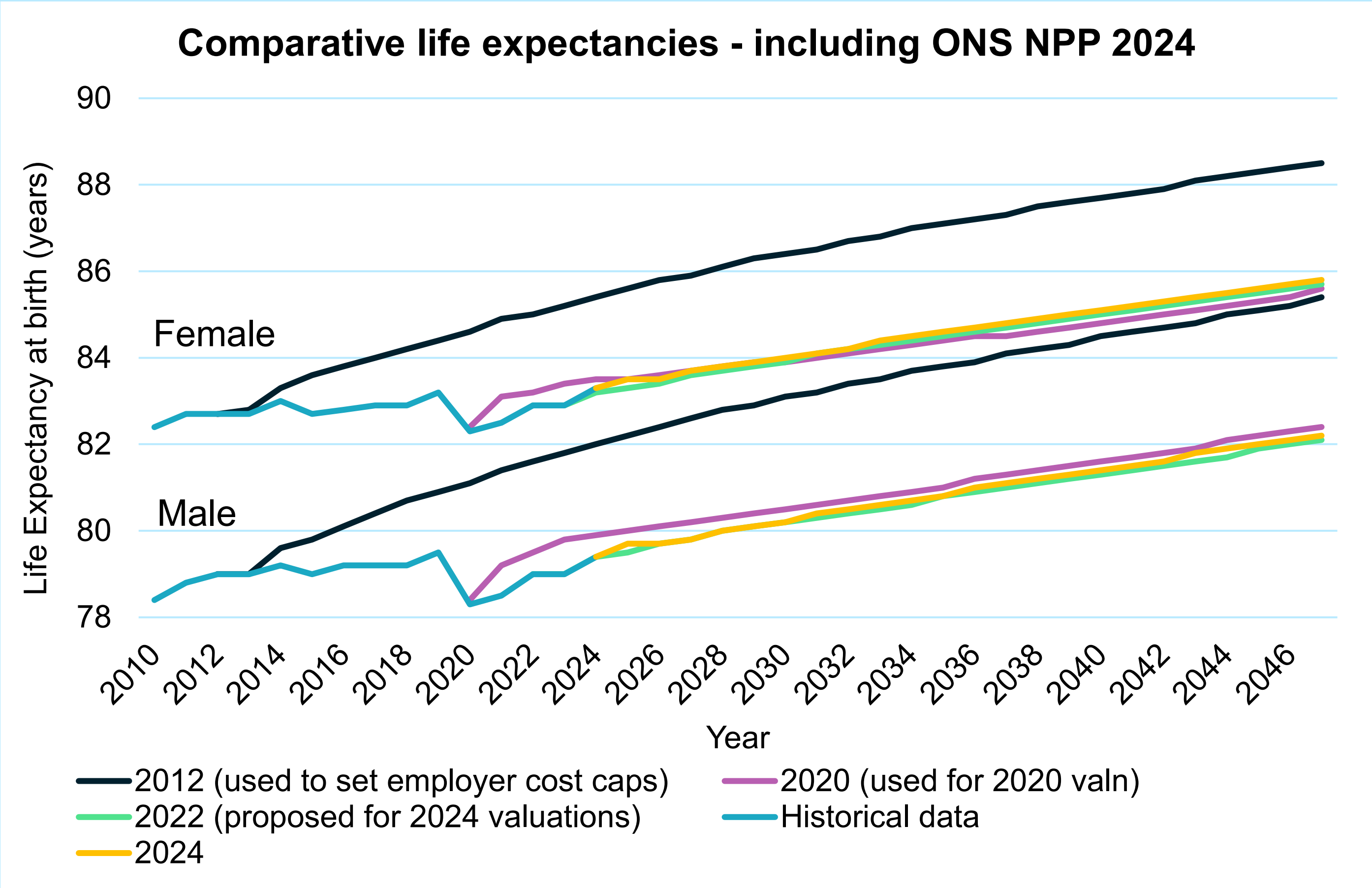
C.1. Life expectancies using the 2022-based mortality improvements reflect a continuation of the general slowdown in age-standardised mortality rates which has taken place since the early 2010s, as well as the COVID-19 impact. The life expectancies are slightly lower than comparable life expectancies using the 2020-based projections for males and similar for females, but with small improvements at some ages.

C.2. The graph below (source: ONS) shows the different relative impacts for males and females. This means that the impact of the 2022-based projections compared to 2020-based projections will depend on the overall membership profile of individual schemes. For example, schemes with predominantly male workforces may experience a slightly larger reduction in ECR and, for CCM, in core and economic check costs relative to the employer cost caps, than a scheme with a more equal distribution between males and females. However, even for male-dominated workforces the overall impact is not likely to be significant.



C.3. Experience over the intervaluation period 2020 to 2024 will include the unusual mortality experience due to the COVID-19 pandemic. However, scheme experience over this period is compared to mortality rates which have been adjusted to allow for population COVID-19 experience. As a result, scheme-set baseline mortality assumptions allow for the impact of COVID-19 up to 2024. The mortality improvement assumption from 2024 (ONS 2022-based) adjusts for the COVID-19 pandemic "shock", to ensure that the high mortality rates experienced are not reflected in all future mortality improvements. The chart above shows that ONS-2022 based projections produce steady improvements in mortality (and therefore life expectancy) from 2024 onwards.

C.4. The graph below (source: ONS) shows the same graph but with the ONS 2024-based projections (published 28 April 2026) in addition. As can be seen from this, the comparative life expectancies between the 2022 and 2024-based projections are very similar.



C.5. Although the link of normal pension age to SPa in scheme design allows for some of the impact of changes in life expectancy over the long-term, these measures are not moving in tandem. This could increase volatility in valuation outcomes in the short-term and lead to potential inconsistencies at valuations.

Appendix D – Data quality

D.1. Analysis of the data provided for the 2024 valuations highlighted a number of issues with the quality of the membership data provided. Full details will be provided in the relevant reports for each scheme. Valuation results are critically dependent on the quality and accuracy of the data used, and my colleagues at GAD working on the relevant schemes have noted the following issues:

- the data provided for the valuations was not fully correct and complete for all members and so approximations have necessarily been made to enable valuation calculations to be undertaken;
- data limitations have resulted in some difficulty in reconciling liability figures to a reasonable degree of certainty;
- a lack of confidence in the data at any particular effective date and concerns about inconsistency with data at other relevant dates.

D.2. For some schemes, it was also noted that there are issues with the membership movement data, which could potentially feed through into the analysis of experience. This could lead to assumptions being set with regards to data that ultimately does not reflect actual experience. This could then lead to unexpected changes from one valuation to the next which might need to be rectified by further changes to assumptions at future valuations, potentially introducing additional volatility to valuation outcomes.

D.3. Previously, there were a number of problems with data quality at the 2012, 2016 and 2020 valuations. The work to date on the 2024 valuations highlights that data quality continues to be an issue in some areas, with the implementation of McCloud remedy contributing to those issues. This may potentially lead to adjustments being required at subsequent valuations to correct the ECRs for potential over/under payments from April 2027 due to data deficiencies, which only become apparent in the future.

D.4. Given the relatively short period between the completion of the 2020 valuations and the 31 March 2024 effective date of the valuation data, and the impact of McCloud work, there has been limited time for pension scheme administrators or actuaries to carry out wide ranging data improvement work. The relatively longer timeframe to the 2028 valuations may offer an opportunity to progress with such initiatives. My colleagues in GAD will be reaching out to all schemes to discuss data improvement.

Other data implications

D.5. To the extent that any liability estimate at the 2024 valuation turns out to be incorrect, this will work its way through the valuations in the usual way. If the liability, and hence the resulting ECR, has been overstated then a surplus will build up which will be recognised at the following valuation and result in a lower than otherwise ECR at that point. Conversely, if the liability has been understated then a deficit will build up which will result in a higher than otherwise ECR at the following valuation. There may also be other wider practical implications of a materially incorrect liability estimate on the ECR, and further implications for scheme factors and the CCM.

D.6. It was noted at the 2020 valuations that there was considerable uncertainty around the liability estimate for the Fire schemes following the Matthews judgement, resulting from limited data. The member option exercises following the Matthews judgment are in progress, and there remains significant uncertainty about the eventual outcome, particularly in relation to member take up. Since this relates to legacy schemes only, there is no impact on the CCM.

D.7. The employer cost caps set at the 2012 valuations included an allowance for funding strains arising from the participation in the Public Sector Transfer Club (the "Club"). These funding strains related mainly to the cost of maintaining the final salary link in the legacy final salary schemes. Following the reforms to the CCM, the expected funding strains arising from the participation in the Club are lower, resulting in downward pressure on the CCM. HM Treasury has decided not to revisit employer cost caps to remove this mismatch. Data is not generally available that isolates the Club funding strains related to reformed scheme benefits only.